Pham 87193


Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 87193 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87193 has 13 members, 0 are drafts.
Phages represented in each track:

- Track 1 : Keelan_112
- Track 2 : Fryberger_110, Guey18_115, Ziko_113, Volt_114, Ronaldo_112
- Track 3 : Syleon_87, Kudefre_86
- Track 4 : Sephiroth_84
- Track 5 : Octobien $\overline{14} 84$
- Track 6 : Rabbitrun $\overline{80}$
- Track 7 : Trax 80
- Track 8 : Neville_77


## Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 1 , it was called in 5 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Kudefre_86, Octobien14_84, Sephiroth_84, Syleon_87, Trax_80,

Genes that have the "Most Annotated" start but do not call it:

- Neville_77, Rabbitrun_80,

Genes that do not have the "Most Annotated" start:

- Fryberger_110, Guey18_115, Keelan_112, Ronaldo_112, Volt_114, Ziko_113,


## Summary by start number:

Start 1:

- Found in 7 of 13 ( $53.8 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 13
- Called $71.4 \%$ of time when present
- Phage (with cluster) where this start called: Kudefre_86 (DU1), Octobien14_84
(DU1), Sephiroth_84 (DU1), Syleon_87 (DU1), Trax_80 (DU2),
Start 7:
- Found in 6 of 13 ( $46.2 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called $16.7 \%$ of time when present
- Phage (with cluster) where this start called: Neville_77 (DU2),

Start 11:

- Found in 7 of 13 ( $53.8 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called $14.3 \%$ of time when present
- Phage (with cluster) where this start called: Rabbitrun_80 (DU2),

Start 13:

- Found in 1 of 13 ( $7.7 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Keelan_112 (DP),

Start 16:

- Found in 11 of 13 ( 84.6\%) of genes in pham
- Manual Annotations of this start: 5 of 13
- Called $45.5 \%$ of time when present
- Phage (with cluster) where this start called: Fryberger_110 (DP), Guey18_115 (DP),

Ronaldo_112 (DP), Volt_114 (DP), Ziko_113 (DP),

## Summary by clusters:

There are 3 clusters represented in this pham: DU1, DU2, DP,
Info for manual annotations of cluster DP:

- Start number 13 was manually annotated 1 time for cluster DP.
- Start number 16 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster DU1:

- Start number 1 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 1 was manually annotated 1 time for cluster DU2.
- Start number 7 was manually annotated 1 time for cluster DU2.
-Start number 11 was manually annotated 1 time for cluster DU2.


## Gene Information:

Gene: Fryberger_110 Start: 53670, Stop: 54146, Start Num: 16
Candidate Starts for Fryberger_110:
$(10,53628),(14,53658)$, (Start: 16 @ 53670 has 5 MA's), (17, 53682), (18, 53691), (22, 53769), (28, $53817),(29,53850),(30,53856),(41,54000),(46,54012),(48,54024),(54,54111),(56,54126)$,

Gene: Guey18_115 Start: 54993, Stop: 55469, Start Num: 16
Candidate Starts for Guey18_115:
(10, 54951), (14, 54981), (Start: 16 @54993 has 5 MA's), (17, 55005), (18, 55014), (22, 55092), (28, $55140),(29,55173),(30,55179),(41,55323),(46,55335),(48,55347),(54,55434),(56,55449)$,

Gene: Keelan_112 Start: 54730, Stop: 55245, Start Num: 13
Candidate Starts for Keelan_112:
(12, 54724), (Start: 13 @547̄30 has 1 MA's), (18, 54769), (21, 54841), (22, 54847), (29, 54940), (34, $55006),(40,55084),(41,55090),(43,55093)$, $(50,55150)$, $(51,55171)$, $(52,55180)$,

Gene: Kudefre_86 Start: 50305, Stop: 50994, Start Num: 1
Candidate Starts for Kudefre_86:
(Start: 1 @ 50305 has 5 MA's), (2, 50338), (5, 50362), (Start: 7 @ 50383 has 1 MA's), (8, 50386), (9, 50422), (Start: 11 @50431 has 1 MA's), (15, 50461), (Start: 16 @50467 has 5 MA's), (23, 50584), (25, $50590)$, $(26,50605)$, $(30,50662)$, $(31,50671)$, $(36,50746)$, $(38,50776)$ ), $(39,50791),(45,50809)$ ), (47, 50821), (49, 50848), (51, 50884), (52, 50893), (53, 50914), (57, 50953), (58, 50986),

Gene: Neville_77 Start: 48709, Stop: 49326, Start Num: 7
Candidate Starts for Neville_77:
(Start: 1 @48634 has 5 MA's), (Start: 7 @48709 has 1 MA's), (8, 48712), (Start: 11 @48757 has 1 MA's), (Start: 16 @48790 has 5 MA's), (17, 48802), (19, 48856), (20, 48883), (23, 48907), (24, 48910), (30, 48985), (31, 48994), (32, 49015), (33, 49027), (36, 49069), (37, 49075), (38, 49099), (45, 49135), $(47,49147),(51,49210),(54,49252),(55,49261),(58,49318)$,

Gene: Octobien14_84 Start: 49617, Stop: 50303, Start Num: 1
Candidate Starts for Octobien14_84:
(Start: 1 @49617 has 5 MA's), (2, 49650), (3, 49662), (5, 49674), (Start: 7 @49695 has 1 MA's), (Start: 11 @49743 has 1 MA's), (15, 49773), (Start: 16 @49779 has 5 MA's), (17, 49791), (23, 49896), (25, 49902), (27, 49929), (30, 49971), (31, 49980), (36, 50055), (38, 50085), (42, 50109), (45, 50118), (51, 50193), (52, 50202), (53, 50223), (57, 50262), (58, 50295),

Gene: Rabbitrun_80 Start: 49025, Stop: 49594, Start Num: 11
Candidate Starts for Rabbitrun_80:
(Start: 1 @48899 has 5 MA's), (4, 48944), (6, 48956), (Start: 11 @49025 has 1 MA's), (19, 49124), (23, 49175), (24, 49178), (30, 49253), (31, 49262), (33, 49295), (36, 49337), $(37,49343),(38,49367)$, $(42,49394),(43,49397),(44,49400),(45,49403),(47,49415),(51,49478),(58,49586)$,

Gene: Ronaldo_112 Start: 54575, Stop: 55051, Start Num: 16
Candidate Starts for Ronaldo_112:
(10, 54533), (14, 54563), (Start: 16 @54575 has 5 MA's), (17, 54587), (18, 54596), (22, 54674), (28, $54722),(29,54755),(30,54761),(41,54905),(46,54917),(48,54929),(54,55016),(56,55031)$,

Gene: Sephiroth_84 Start: 50477, Stop: 51166, Start Num: 1 Candidate Starts for Sephiroth_84:
(Start: 1 @ 50477 has 5 MA's), ( 2,50510 ), ( 5,50534 ), (Start: 7 @ 50555 has 1 MA's), ( 8,50558 ), (9, 50594), (Start: 11 @50603 has 1 MA's), (15, 50633), (Start: 16 @50639 has 5 MA's), ( 23,50756 ), ( 25, $50762),(26,50777),(30,50834),(31,50843),(36,50918),(38,50948),(39,50963),(45,50981),(47$, $50993),(49,51020),(51,51056),(53,51086),(57,51125),(58,51158)$,

Gene: Syleon_87 Start: 50415, Stop: 51104, Start Num: 1
Candidate Starts for Syleon_87:
(Start: 1 @50415 has 5 MA's), (2, 50448), (5, 50472), (Start: 7 @50493 has 1 MA's), (8, 50496), (9, 50532), (Start: 11 @50541 has 1 MA's), (15, 50571), (Start: 16 @50577 has 5 MA's), (23, 50694), (25, $50700)$, (26, 50715), (30, 50772), (31, 50781), (36, 50856), (38, 50886), (39, 50901), (45, 50919), (47, 50931), (49, 50958), (51, 50994), (52, 51003), (53, 51024), (57, 51063), (58, 51096),

Gene: Trax_80 Start: 49599, Stop: 50291, Start Num: 1
Candidate Starts for Trax_80:
(Start: 1 @49599 has 5 MA's), (Start: 7 @49674 has 1 MA's), (8, 49677), (Start: 11 @49722 has 1 MA's), (Start: 16 @49755 has 5 MA's), (17, 49767), (19, 49821), (20, 49848), (23, 49872), (30, 49950), (31, 49959), (32, 49980), (33, 49992), $(35,50022),(36,50034),(37,50040),(38,50064),(45,50100)$, $(47,50112),(51,50175),(54,50217),(55,50226),(58,50283)$,

Gene: Volt_114 Start: 54739, Stop: 55215, Start Num: 16 Candidate Starts for Volt_114:
(10, 54697), (14, 54727), (Start: 16 @54739 has 5 MA's), (17, 54751), (18, 54760), (22, 54838), (28, $54886),(29,54919),(30,54925),(41,55069),(46,55081),(48,55093),(54,55180),(56,55195)$,

Gene: Ziko_113 Start: 54581, Stop: 55057, Start Num: 16
Candidate Starts for Ziko_113:
(10, 54539), (14, 54569), (Start: 16 @54581 has 5 MA's), (17, 54593), (18, 54602), (22, 54680), (28, $54728),(29,54761),(30,54767),(41,54911),(46,54923),(48,54935),(54,55022),(56,55037)$,

